



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,389	02/27/2004	Rie Miyazaki	Q80155	4816

23373 7590 06/28/2005

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
----------

NOTE, JANIS L

ART UNIT	PAPER NUMBER
----------	--------------

1756

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/787,389

Applicant(s)

MIYAZAKI ET AL.

Examiner

Janis L. Dote

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/19/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1756

1. The drawings filed on Jul. 19, 2004, are not acceptable. The drawings are not in compliance with 37 C.F.R. 1.121, because they are not properly identified in the top margin as "Replacement Sheet," as required under 37 C.F.R. 1.121(d).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheets should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures.

2. The disclosure is objected to because of the following informalities:

(1) The instant specification labels the toner in comparative example 5A as a "comparative." See Table 2A at page 88 of the instant specification. However, the toner in comparative example 5A meets all the limitations, including the relaxation modulus limitations, recited in instant claim 1. It is not clear what applicants consider to be their invention.

(2) The instant specification also labels the toners in comparative examples 4B and 5B as "comparatives." See Table 2B at page 108 of the instant specification. However, the toners in comparative examples 4B and 5B meet all the limitations, including the relaxation modulus limitations, recited in instant

Art Unit: 1756

claim 3. It is not clear what applicants consider to be their invention.

(3) The use of trademarks, e.g., Bontron S-34 [BONTRON S-34] at page 52, line 21, has been noted in this application. The trademarks should be capitalized wherever they appear and be accompanied by the generic terminology. This example is not exhaustive. Applicants should review the entire specification for compliance.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1756

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f), or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 6,300,024 B1 (Yusa), as evidenced by applicants' admissions at page 6, lines 3-7, page 89, line 8, to page 90, line 11, page 109, line 8, to page 110, line 7; and Tables 1A, 2A, 1B, and 2B at pages 87, 88, 107, and 108, respectively.

Yusa discloses a toner comprising a polyester resin and 2 wt% of a polyethylene wax, i.e., a release agent. See example 1, cyan toner A, at cols. 55 and 56. The amount

Art Unit: 1756

polyethylene wax is within the releasing agent amount of "3 wt% or less" recited in instant claims 2 and 4.

Yusa does not disclose that the toner has the relaxation modulus properties recited in instant claims 1 and 3. However, Yusa discloses that in a oil-less fixing device, the toner exhibits a low temperature fixability of 115°C and a region of no offset between 115 to greater than 200°C, i.e., a no offset temperature range greater than 85°C. The toner also provides OHP, i.e., overhead projection, images having excellent transparency. No winding of the "PPC" paper around the fixing roller was observed. Col. 57, lines 8-17; col. 58, lines 40-46 and 51-54; and Table 5 at col. 61, example 1. These properties appear to the same properties sought by applicants.

The instant specification at page 6, lines 3-7, discloses that the "object of the present invention is to provide a toner capable of effectively repressing hot offset of a toner in fixing characteristics, while effectively preventing the winding of a recording medium round a fixing member."

The instant specification shows that in an oil-less fixing device, toners that meet the relaxation modulus properties recited in instant claim 1 and the amount of the releasing agent recited in instant claim 2 exhibited no winding of paper around the pressing roller, no-offset in a temperature range of 130 to

Art Unit: 1756

195°C, 145-200°C, or 140-200°C, and provided images with "good transparency." See Table 1A at page 87 of the instant specification, examples 1A to 5A; and page 89, lines 8-17.

Toners that do not possess the relaxation modulus properties recited in instant claim 1, but which meet the amount of the releasing agent amount recited in instant claim 2, provided images with "good transparency," but exhibited winding of paper around the pressing roller and no-offset in a narrower temperature range than the toners of examples 1A to 5A, i.e., of 140 to 150°C, 130-165°C, or 130-170°C. See Table 2A at page 88, comparative examples 1A to 3A; and page 89, line 18, to page 90, line 11.

The instant specification also shows that in an oil-less fixing device, toners that meet the relaxation modulus limitations recited in instant claim 3 and the amount of the releasing agent recited in instant claim 4 exhibited no winding of paper around the pressing roller, no-offset in a temperature range of 130 to 195°C, 145-200°C, or 140-200°C, and provided images with "good transparency." See Table 1B at page 107 of the instant specification, examples 1B to 5B; and page 109, lines 8-17.

Toners that do not possess the relaxation modulus limitations recited in instant claim 3, but which meet the

Art Unit: 1756

amount of the releasing agent recited in instant claim 4, provided images with "good transparency," but exhibited winding of paper around the pressing roller and no-offset in a narrower temperature range than the toners of examples 1B to 5B, i.e., of 140 to 150°C, 130-165°C, or 130-170°C. See Table 2B at page 108, comparative examples 1B to 3B; and page 109, line 17, to page 110, line 7.

Thus, because the toner disclosed in Yusa appears to have the same properties sought by applicants, it is reasonable to presume that the toner disclosed by Yusa has the relaxation modulus properties recited in instant claims 1 and 3.

The recitation "for use in an image-forming apparatus equipped with an oil-less fixing unit comprising a main heating member and a pressing member, the main heating member gets in contact with the back of an unfixed toner on a recording medium and fixes the unfixed toner at a nip part of the main heating member and the pressing member, the main heating member and the pressing member define a boundary surface thereof, and the surface takes a configuration protruding toward the side of the main heating member" in claims 1 and 3 is merely a statement of intended use that does not distinguish the toner composition disclosed by Yusa. The recitation of the intended use of the claimed invention must result in a structural or compositional



Art Unit: 1756

difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). As discussed above, the toner disclosed by Yusa meets the limitations recited in the instant claims. Thus, the intended use recited in the instant claims does not result in a compositional or structural difference between the toner recited in the instant claims and the toner disclosed in the prior art.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being

Art Unit: 1756

unpatentable over claims 1 and 2 of copending Application No. 10/787,394 (Application'394), as evidenced by that portion of the disclosure in Application'394 that supports the claimed subject matter in claims 1 and 2 of Application'394, and applicants' admissions in examples 1A and 1B and Tables 1A and 1B of the instant specification.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter in Applicatin'394 renders obvious the toner recited in the instant claims.

Reference claim 1 covers a toner that has an "initial relaxation modulus  $G(t=0.01)$  [Pa] of the toner at 120°C, in relaxation time of 0.01 sec, of  $G(t=0.01) \text{ (Pa)} \geq 1.0 \times 10^5 \text{ [Pa]}$ ," which meets the  $G(t=0.01)$  at 120°C range of  $\geq 1.0 \times 10^5 \text{ Pa}$  recited in instant claims 1 and 3. Reference claim 2, which depends on reference claim 1, requires that the toner comprise a releasing agent in an amount of 3 wt% or less, which meets the toner composition limitation recited in instant claims 2 and 4. Reference claim 1 further recites that the toner can be used in

Art Unit: 1756

an image-forming apparatus equipped with an oil-less fixing device as recited in reference claim 1.

The claims of Application'394 do not recite that the toner has a ratio of  $G(t=0.01)$  to  $G(t=0.1)$  at  $180^{\circ}\text{C}$ , in relaxation time of 0.1 sec, of  $(G(t=0.01)/G(t=0.1)) \geq 20$  as recited in instant claim 1. Nor do the claims of Application'394 recite that the toner has an initial relaxation modulus  $G(t=0.01)$  at  $180^{\circ}\text{C}$ , in relaxation time of 0.01 sec,  $\geq 1.0 \times 10^4$  Pa as recited in instant claim 3. However, that portion of Application'394 that supports the toner recited in reference claims 1 and 2 teaches that such a toner provides results in winding, "good region of offset," and transparency (Haze) that are the same or similar to the results obtained from a toner that supports the toner recited in instant claims 1 and 2 disclosed in the instant specification, or from a toner that supports the toner recited in instant claims 3 and 4 disclosed in the instant specification. See Application'394, Table 1A, toner 1A; and the instant application, Table 1A, toner 1A, and Table 1B, toner 1B. In addition, toner 1A in Application'394 comprises a toner binder resin that is similar to that used in toners 1A and 1B in the instant specification. Toner 1A in Application'394 is also made by process steps that are same as those used to make the toner 1A and 1B in the instant specification. When addressing the use

Art Unit: 1756

of whether a claim in the application defines an obvious variation of an invention claimed in a patent, "those portions of the specification which support the patent claims may also be examined and considered." See MPEP 804,II.B.1, pp. 800-22 to 800-23, citing In re Vogel, 164 USPQ 619, 622 (CCPA 1970).

Thus, because the toner disclosed in Application'394 that supports the toner recited in reference claims 1 and 2 exhibits the same properties as the toners that support the toners recited in instant claims 1-4 disclosed in the instant specification, it is reasonable to presume that the toner claimed in Application'394 has a ratio of  $G(t=0.01)$  to  $G(t=0.1)$  at 180°C as recited in instant claim 1 and an initial relaxation modulus  $G(t=0.01)$  at 180°C as recited in instant claim 3. In other words, the two toners appear to be the same material. The burden is on applicants to prove otherwise. Fitzgerald, supra.

It would have been obvious for a person having ordinary skill in the art, in view of the subject matter claimed in Application'394 and that portion in Application'394 that supports the subject matter claimed in Application'394, to make and use a toner as recited in the instant claims because that person would have had a reasonable expectation of successfully obtaining a toner that is capable of forming fixed toned images using an oil-less fixing device.

Art Unit: 1756

The recitation "for use in an image-forming apparatus equipped with an oil-less fixing unit comprising a main heating member and a pressing member, the main heating member gets in contact with the back of an unfixed toner on a recording medium and fixes the unfixed toner at a nip part of the main heating member and the pressing member, the main heating member and the pressing member define a boundary surface thereof, and the surface takes a configuration protruding toward the side of the main heating member" in claims 1 and 3 is merely a statement of intended use that does not distinguish the toner composition claimed in Application'394. As discussed above, the toner claimed in Application'394, as evidenced by that portion in Application'394 that supports the subject matter claimed in Application'394, meets the limitations recited in the instant claims. Thus, the intended use recited in the instant claims does not result in a compositional or structural difference between the toner recited in the instant claims and the toner claimed in Application'394.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be

Art Unit: 1756

reached on (571) 272-1385. The central fax phone number is (703) 872-9306.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLD

Jun. 22, 2005

*Janis L. Dote*  
JANIS L. DOTE  
PRIMARY EXAMINER  
GROUP 1500  
A00